XP-002410773

(C) WPI / Thomson
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AP - JP20000183046 20000619
PR - JP20000183046 20000619
TI - New inhibitor of methionase and/or protease, and oral composition effective for bad breath
IW - NEW INHIBIT PROTEASE ORAL COMPOSITION EFFECT BAD BREATH
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IC - A61K7/26; A61K31/05; A61K31/216; A61K31/353; A61K31/4166; A61K31/5375; A61K35/02; A61K35/78; A61K38/00; A61K7/22; A61K7/24; A61P1/02; A61P43/00
DC - B04 D21
AB - NOVELTY :
New methionase and/or protease inhibitor comprises one or more extracts of Lycopersicom esculenthum, Uncaria gambir Roxburgh, barks of Quillaja Saponaria Mol., Hamamelis virginiana L., leaves of Eriobotrya japonica Lindely, Eguisetum arvense L., Crataegus oxyacantha L., Diospyros kaki, Curcuma domestica, Ginkgo biloba, green tea, black tea and oolong tea (Camellia sinensis).
- DETAILED DESCRIPTION :
INDEPENDENT CLAIMS are also included for
(1) an inhibitor of methionase and/or protease comprising one or more active ingredient selected from morpholine, paprika pigment, montmorillonite, chlorogenic acid, apple polyphenol, catechin, allantoin chlorohydroxy aluminum, allantoin dihydroxy aluminum and Arg-Lys peptide; and
(2) oral composition containing at least one inhibitor of methionase and/or protease.
- ACTIVITY :
Periodontal.
- MECHANISM OF ACTION :
Methionase and/or protease inhibitor.
- USE :
The inhibitor is used in the field of medicine, cosmetics or food to prevent efficiently methionase and/or protease which causes bad breath. The oral composition inhibits bad breath caused by periodontal disease or methionase or protease in the form of oral refreshing candies, spray type oral refreshing agent, mouth wash, tooth paste, bad breath inhibitor or oral ointment.
- ADVANTAGE :
The inhibitor and the oral composition are safe.
- PHARMACEUTICALS :
Preferred components: The oral composition preferably contains one or more compounds selected from cinnamic aldehyde, citral, n-hexanal,

heliotropin, indole, n-octanal, n-nonanal, n-decanal, n-dodecanal and/or gamma -methylindole.

Preferred composition: The oral composition preferably contains quaternary ammonium salts and bisbiguanide compound.

- EXAMPLE :

To the various sample aqueous solutions (0.5 ml) of the above described extracts (5 wt%) were added methyl mercaptan, enzyme and Porphyromonas gingivalis bacteria (P.g. bacteria) suspension (1 ml), and the whole was incubated at 30 [deg]C for 5 minutes. Then, L-metione solution (1 ml) was added, and the whole was incubated for another 10 minutes to measure the remaining amount of methyl mercaptan and inhibitory rate of methionase of each sample. Protease inhibitory activities of the various kinds of extracts described above were also measured by addition of casein solution (2 ml) to the incubated mixture of the sample aqueous solutions (0.5 ml) of the extracts (6 wt%) and P.g bacteria suspension (0.5 ml). The results showed as in table (1) that every sample solution of the extract had methionase and/or protease inhibitory activity. Table (1)-p